

Division of Marketing  
Agricultural Development and Diversification (ADD) Program  
1991 Grant Final Report

Grant Number 06005

**Grant Title** Herbs, Edible Flowers & Greens: An Alternative Cash Crop for  
Wisconsin Farms

**Amount Awarded** \$14,763.00

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**Organization** Alyce's Herbs  
Madison

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W.H.G.P.

Final Report

Wisconsin Herb Grower's Project

# 1992 Growing Season



11/11/81  
P.O. Box 9563, Madison, WI 53715

608/274-4911

MK-DD-2.2  
7/23/91tb

# FINAL SUMMARY

## Agricultural Development and Diversification Program 3rd Round Grant Progress Report

Date: 3/9/92

Project Title: Herbs, Edible Flowers & Greens/An Alternative Cash Crop

WDATCP Contract No.: 60\_05

Contractor Name: Alyce's Herbs

Project Leader: Alice Petlock Pauser

Progress Report For (Dates) 2/5/92-3/5/92

This report is submitted in fulfillment of Appendix A of the contract. The reports should: summarize project activities and key results for the reporting period, and; describe project activities and results expected during the next phase of the project. Attach a summary of project expenditures for the reporting period (MK-DD-1.2 - Grant Project Invoice - Third Round Grants [green form] with supporting documentation).

After reviewing the past year of work on developing this project it has proven to be a viable source of income for the growers that participated in the central warehouse even during the first attempts at selling their produce. We have determined that a central warehouse for herbs, edible flowers and greens is needed in order to efficiently ship bulk amounts to the Chicago area. At the onset of the project we gave several lectures on the advantages of combining efforts in order to effectively compete with out-of-state growers and shippers. We continued to attend local and county programs to try and recruit growers and to find out where the established growers were located. One of the problems we encountered was the fact that we underestimated the amount of travel and phone time it was going to take in order to begin to organize the growers. We have a widespread area encompassing these growers. Inquiries came from as far north as Rice Lake. BY sending out the 1992 WHGP information packet, we were able to determine the location of the growers and while 90% are located in southern Wisconsin. We still had a number showing interest in the central part of the State. For these individuals transportation of goods will be the most difficult task. (We will address this in our phase II grant proposal)

From 7/91-10/91 we sold over 1½ tons of produce for area growers to local restaurants and to the terminal annex in Chicago, IL. We could not supply all of the demand from the Chicago buyers. An early frost cut short our basil season. The acquisition of Greenhouse space helped us determine whether or not it would be profitable to grow and send items to Chicago during

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Attach Additional Information If Needed

Final Summary  
WHGP 1991-92

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the winter months. We kept detailed growing records and found that in order to have a harvestable crop, the greenhouses should be planted in September. We planted in November and had the first harvesting of edible flowers at the beginning of January. Lettuces, on the other hand, were ready for harvest within 45 days. All of the edible flowers (Pansies, nasturtiums and marigolds) are sold to the CHicago buyers with the exception of three buyers here in the MADison area. The Milwaukee area has yielded ZERO as far as interest or buyers. We have fondly named it the city with the "velcro palate".

The PLAN OF WORK was followed and completed on schedule. We did not have any difficulties in adhering to schedules and keeping in contact with growers and key personnel.

To date, WHGP has been able to attain market price for the growers who contacted us during the 1991 season. We have already sold produce for growers (watercress) in March 1992.

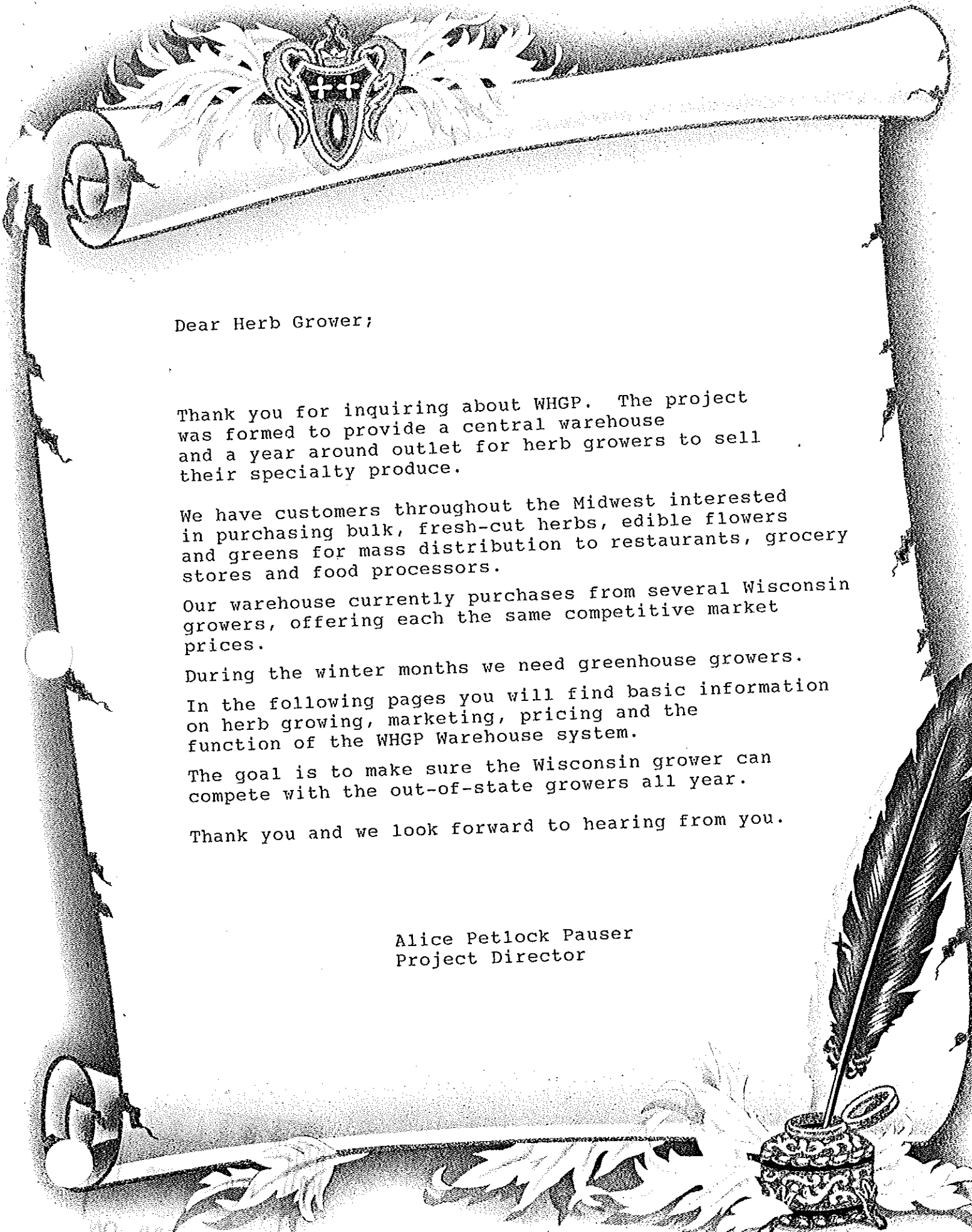
We have dependable, reputable buyers in the CHicago area who are on a set purchasing schedule with us. We ship twice a week. Because of an arrangement with a local grocer we do not pay any freight charges.

Now that we know where the growers are and what is generally available, we can work at better organizing them and helping with decisions on which crops to grow in their areas. The central warehousing has been able to get the grower the highest possible price for their products. We will continue to specialize in the areas of greens, herbs and edible flowers. These crops are showing consistently high prices and high demands and can be grown in a relatively small area of 3 acres or less and still yield a good profit.

The major conclusion of this project is that the central warehousing of these crops is the most efficient and cost effective way to market large quantities to the purveyors in the Midwest. Our main marketing area will continue to be Chicago as long as the freight arrangements remain at no or low cost to the warehouse and the grower.

We have built a solid base and will continue to improve and streamline the operation to better organize the growers this season.

###



Dear Herb Grower;

Thank you for inquiring about WHGP. The project was formed to provide a central warehouse and a year around outlet for herb growers to sell their specialty produce.

We have customers throughout the Midwest interested in purchasing bulk, fresh-cut herbs, edible flowers and greens for mass distribution to restaurants, grocery stores and food processors.

Our warehouse currently purchases from several Wisconsin growers, offering each the same competitive market prices.


During the winter months we need greenhouse growers.

In the following pages you will find basic information on herb growing, marketing, pricing and the function of the WHGP Warehouse system.

The goal is to make sure the Wisconsin grower can compete with the out-of-state growers all year.

Thank you and we look forward to hearing from you.

Alice Petlock Pauser  
Project Director



## Growing Herbs

Herbs can be an efficient method of increasing your per-acre profit. They are hardy, lower maintenance plants which are always in demand.

Most herbs require loose, fertile, well-drained soil that is 6.5 to 7.0 pH. They also need full sun. There are a few varieties that prefer a somewhat shaded location and a cool growing season.

If you are just starting out, You should begin with a  $\frac{1}{2}$  acre or less to find out which plants are most suited to your location.

Be sure the site you select is as chemically free as possible and is protected from any herbicide run-off or contamination.

Natural compost, well-rotted manures, fish emulsion and grass clippings are preferred for fertilizing and loosening the soil. You may need to adjust the acidity if it is too low.

Raised beds are ideal if you have an efficient watering system. Herb plants must be kept moist when they are young. Especially after transplanting.

Most herbs should be set out as hardened off transplants. Dill, borage, nasturtiums and lettuces should be sown directly into the soil after the ground reaches 55 degrees.

We will list the most popular varieties and their growing needs. Also, a list of seed sources and reference materials.

Not every area in our State is conducive to every variety. Unfortunately the best way (and worst) to find this out is to simply plant and keep detailed growth records.

Your first season will be a learning experience!



## Herb Varieties Which Show Highest Profit

### ANNUALS

- \* Basil, Sweet
- \* Chervil (SS)
- \* Borage (SS)
- \* Coriander (SS)
- \* Dill (SS)

### LETTUCES

- \* Oakleaf
- \* Mesclun mix

### EDIBLE FLOWERS

- \* Pansey
- \* Marigold (lemon gem)
- \* Nasturtium
- \* Snapdragons
- ...50 blossoms per tray

### PERENNIALS

- \* Chives
- \* Garlic (also considered an annual if bulbs are planted every season.)
- \* Marjoram
- \* Mints (spearmint, peppermint)
- \* Oregano (Greek)
- \* Parsley (Italian flat leaf & curley moss)
- \* Rosemary (plants must be taken in during winter)
- \* Sage
- \* Shallot (french)
- \* Sorrel
- \* Savory
- \* Tarragon (French)
- \* Thyme (reg. & lemon)
- \* Arugula

(SS)=self-sowing if left to form seed heads.

Plants per Acre Conversion Table

Between Rows	Space Between Plants												
	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	34"	36"
2' (24")	21760	18668	16230	14520	13068	11880	10890	10052	9334	8712	8167	7687	7260
2½ (30")	17420	14934	13068	11616	10454	9504	8712	8041	7467	6969	6534	6149	5808
3' (36")	14520	12445	10890	9680	8712	7920	7260	6701	6222	5808	5445	5125	4840
3½ (42")	12445	10667	9334	8297	7467	6788	6222	5744	5333	4978	4667	4392	4148
4' (48")	10890	9334	8167	7260	6534	5940	5445	5026	4667	4356	4084	3843	3630
4½ (54")	9680	8297	7260	6453	5808	5280	4840	4468	4148	3872	3630	3416	3226
5' (60")	8712	7467	6534	5808	5227	4752	4356	4021	3734	3485	3267	3075	2904

Appearance is very important. Most of these items are sold to upscale restaurants and grocers. We discourage chemical application of pesticides and fertilizers. An insecticidal soap is recommended for severe pest outbreaks. These are available from Safer, Ringer and Nature's Way.

### PACKING FOR SALE TO WHGP

Herbs should be harvested in early morning. Shake the dirt free, never rinse before packing. Pack loosely in waterproof lined boxes. Flowers should be in airtight plastic trays and arranged neatly so as not to crush blossoms. All produce must be kept below 45° and above 35° during transit to central warehouse. This can be done in styrofoam or insulated coolers. NEVER PUT HERBS DIRECTLY ON ICE. ARRANGE ICE ON TOP WITH A PERFORATED SHELF TO KEEP THE ICE AWAY FROM THE PRODUCE.

HERB	BOTANICAL NAME	LIFE CYCLE	AV. HGT.	GROWING	SPECIFIC NEEDS	BASIC USES
CORIANDER	<i>Coriandrum sativum</i> ("Chinese parsley")	HA	24"	Sow inside; SS		Culinary, potpourri
COSTMARY	<i>Chrysanthemum Balsamita</i> ("Bible Leaf")	P	36"	Root division	Will grow in shade but not blossom	Culinary, potpourri, cosmetics
DILL	<i>Anethum graveolens</i>	A	30"	Sow outside	Rich soil	Culinary
FENNEL	<i>Foeniculum vulgare</i>	A	30"	Sow outside by itself	Well-limed soil	Culinary, cosmetic
FENUGREEK	<i>Trigonella Foenumgraecum</i>	A	18"	Sow outside	Rich soil	Maple flavoring, sugar substitute, medicinal
FEVERFEW	<i>Chrysanthemum Parthenium</i>	P	36"	Early spring sowing or root division	May not remain perennial if winter soil too wet or if allowed to go to seed	Arrangements, insect repellent, cosmetics, potpourri
GARLIC	<i>Allium Sativum</i>	P	24"	Plant bulbs in fall, bulb division	Moist, rich soil	Culinary, medicinal, cosmetic
GERANIUMS (Scented)	<i>Pelargonium</i>	TP	18"	Stem cuttings		Culinary, potpourri, cosmetics
HOREHOUND	<i>Marrubium vulgare</i> (White)	P	18"	Sow indoors; SS; root division	Loves hot, dry soil	Garden edgings, bouquets, candy, coughdrops
HYSSOP	<i>Hyssopus officinalis</i> and family	P	24"	Sow indoors	Well-limed soil; partial shade OK	Potpourri fixative, white fly deterrent, cosmetics
LADY'S MANTLE	<i>Alchemilla vulgaris</i>	P	12"	Root division; SS		Sleep pillows, arrangements, medicinal, cosmetic
LAVENDER (English)	<i>Lavendula angustifolia</i>	P	24"	Sow indoors, stem cuttings, root division, layering		Potpourri, cosmetics, arrangements, medicinal
LEMON BALM	<i>Melissa officinalis</i>	P	24"	Sow inside; SS; root division	Part shade OK	Culinary, potpourri, cosmetic
LEMON VERBENA	<i>Aloysia triphylla</i>	TP	36"	Stem cuttings	Rich soil	Culinary, potpourri, medicinal, cosmetic
LOVAGE	<i>Levisticum officinale</i>	P	6'	Sow inside or outside	Moist, rich soil; part shade OK	Celery flavor for cooking, salt substitute; cosmetics
MARJORAM (Sweet)	<i>Origanum Majorana</i>	TP	12"	Sow inside or outside	Rich soil	Culinary, potpourri, medicinal
MINTS	<i>Mentha</i> family	P	18-30"	Root divisions, generally	Most like moist soil & part shade	Culinary, potpourri, bouquets, medicinal, cosmetic
OREGANO	<i>Oreganum vulgare</i>	P	24"	Root division		Culinary
PARSLEY (Curly)	<i>Petroselinum crispum</i>	BI	12"	Sow outside	Rich soil; part shade OK. 2nd yr. harvest negligible	Very nutritious when fresh; cosmetics



## HERB GROWTH & USE CHART

HERB	BOTANICAL NAME	LIFE CYCLE	AV. HGT.	GROWING	SPECIFIC NEEDS	BASIC USES
AMBROSIA	<i>Chenopodium Botrys</i>	HA	18"	Sow inside or outside; SS		Fragrant fresh or dried arrangements and wreaths
ANGELICA	<i>Angelica archangelica</i>	BI	4'	Sow outside in fall; SS	Moist, rich soil; part shade	Culinary, medicinal, potpourri fixative
ANISE	<i>Pimpinella anisum</i>	A	24"	Sow outside		Culinary, medicinal, cosmetic
ARTEMISIA (Silver)	(Ornamental Silver Mound, King, Queen)	P	6-24"	Root divisions		Fresh or dried wreaths and arrangements
BASIL	<i>Oscimum basilicum</i> and family	A	18"	Sow indoors in late spring	Rich soil; Bush B. best for pot culture	Culinary, potpourri, fly deterrent, cosmetics
BAY, SWEET	<i>Laurus nobilis</i>	TP (in pots)	2-6'	Stem cuttings	Pot culture in cold climates	Culinary, potpourri, cosmetics
BERGAMOT	<i>Monarda didyma</i> ("Beebalm")	P	36"	Root divisions	Part shade	Tea, potpourri, cosmetics
ORAGE	<i>Borago officinalis</i>	A	30"	Sow inside for early start	Rich soil	Cucumber flavor for salads; candied petals; medicinal
CALENDULA	<i>Calendula officinalis</i> ("Pot Marigold")	A	24"	Sow inside in early spring	Sow in peat pots	Culinary, food coloring, medicinal, cosmetic
CAMOMILE (Annual)	<i>Matricaria recutita</i> ("German" C.)	A	18"	Sow inside; SS		Tea, medicinal, dye, potpourri
CAMOMILE (Perennial)	<i>Chamaemelum nobile</i> ("Roman" C.)	P	6"	Sow inside; SS		Hair rinse; ground cover
CARAWAY	<i>Carum Carvi</i>	BI	24"	Sow outside in fall or inside in spring		Culinary, cosmetics
CATMINT	<i>Nepeta mussinii</i>	P	18"	Root divisions		Lovely purple flowers; ant & insect repellent
CATNIP	<i>Nepeta cataria</i>	P	18"	Root divisions or sow inside; SS		Tea, cat tonic insect repellent, cosmetics
CHERVIL	<i>Anthriscus cerefolium</i>	HA	24"	Sow outside in fall	Shade	Culinary
CHIVES	<i>Allium schoenoprasum</i>	P	12"	Sow inside or outside early spring	Rich soil	Culinary, fresh or dried floral arrangements
CLARY SAGE	<i>Salvia viridis</i>	BI	12"	Sow outside in late summer or inside in early spring	Sandy, dry soil	Arrangements, potpourri fixative, cosmetics
IMPERY	<i>Symphytum officinalis</i>	P	36"	Root division in early spring	Rich, moist soil	External healing, cosmetics, composting*

Life Cycles

A = Annual

BI = Biennial (two years to mature)

P = Perennial (comes back each year)

TP = Tender perennial (Killed by frost or)

HERB	BOTANICAL NAME	LIFE CYCLE	AV. HGT.	GROWING	SPECIFIC NEEDS	BASIC USES
PENNYROYAL (English)	<i>Mentha pulegium</i>	P	12" +	Sow inside	Moist soil; part shade OK	Insect repellent, cosmetics, potpourri* *
PINEAPPLE SAGE	<i>Salvia elegans</i>	TP	36"	Stem cuttings		Culinary, potpourri, bouquets
ROSEMARY	<i>Rosmarinus officinalis</i>	TP	1-4'	Stem cuttings	Loves misting of foliage	Culinary, potpourri, cosmetics, incense
RUE	<i>Ruta graveolens</i>	P	24"	Sow inside; root division	Part shade OK	Insect deterrent, hedges, bouquets
SAFFLOWER	<i>Carthamus tinctorius</i>	A	30"	Sow inside mid-spring		Coloring & flavoring food, dye, cosmetics
SAFFRON	<i>Crocus sativus</i>	P	8"	Plant bulbs in fall	Rich soil, part shade	Coloring & flavoring food
SAGE	<i>Salvia officinalis</i>	P	24"	Sow inside; stem cuttings, root divisions	Well-limed soil	Culinary, cosmetic, medicinal
SALAD BURNET	<i>Poterium sanguisorba</i>	P	18"	Sow inside; root division		Cucumber flavor for salads
SANTOLINA (Gray)	<i>Santolina chamaecyparissus</i>	P	24"	Stem cuttings		Hedges & knot gardens, potpourri
SHALLOT	<i>Allium ascalonicum</i>	P	15"	Plant bulbs in early spring; bulb division	Rich soil	Onion flavor & substitute
SHRUB RUELLE (French)	<i>Rumex scutatus</i>	P	18"	Sow outside; SS	Re-sow every 3 yrs.	Culinary
SOUTHERN-WOOD	<i>Artemisia abrotanum</i>	P	3'	Root divisions; layerings, cuttings		Insect deterrent, potpourri, cosmetics, arrangements, wreaths
SUMMER SAVORY	<i>Satureja hortensis</i>	A	18"	Sow inside in peat pots, or outside		Culinary — the "Green Bean" herb
SWEET CICELY	<i>Myrrhis odorata</i>	P	3'	Root division or seeds outside in fall	Rich soil; part shade OK	Anise-flavor sugar substitute, cosmetics, arrangements
SWEET WOODRUFF	<i>Gallium odoratum</i>	P	10"	Root divisions; stem cuttings	All-shade, leafy moist soil	Culinary, potpourri, ground cover
SWEET WORMWOOD	<i>Artemisia annua</i>	HA	5'	Sow inside or out; SS	Needs plenty of room (3' wide)	Fragrant wreaths, arrangements, potpourri
TANSY	<i>Tanacetum vulgare</i>	P	3'	Root division	Toxic to cattle; do not plant where livestock graze	Ant & insect deterrent, fresh & dried arrangements, dye, cosmetics
WORMWOOD (French)	<i>A. dracunculus</i> variety <i>sativa</i>	P	30"	Root divisions or layering		Culinary, cosmetic, medicinal
WORMWOOD (Upright)	<i>T. vulgaris</i>	P	12"	Root division or layering		Culinary, cosmetic, medicinal

### SELLING PRODUCE TO WHGP

WHGP accepts produce on Wednesdays and Saturdays. Herbs are purchased by the pound. Depending on the season growers are paid \$2.50-\$7.50 per pound. Lettuces bring approximately \$1/lb. and edible flowers are \$2.75 per 50 count tray.

WHGP Pays on a weekly basis to all growers. While we cannot guarantee to buy everything you grow, we have never had to say we have an overabundance of produce, especially in the winter.

Our pricing structure is based on the USDA weekly wholesale report. Herbs are a stable seller and the market continues to grow. We expect to sell 4,000 lbs a month during the 1992 season.

WHGP retains the right to refuse inferior quality produce or produce suspect of heavy chemical application.

If you have produce to sell, call our main office number at any time. Orders from purveyors come in twice weekly and are usually large. We recommend calling in your items which are available on Sunday and Wednesday evenings. We will promptly return your calls to let you know if we need those items and how much will require.

The WHGP Warehouse is located on the south side of Madison off Hwy 12/18 and Fish Hatchery Rd.

It will take your growing areas approximately two years to yield significant amounts from perennial plants. Basil, an annual, will produce heavily the first year, as will cilantro/coriander, chervil and lettuce.

In order to have a successful harvest it is wise to obtain various information on the particular plants you are interested in. Your local library has a wealth of reference material. It is wise to subscribe to a professional trade publication to keep current on new varieties and methods of pest and weed control.

You are welcome to tour our greenhouses and demonstration garden by appointment.

Thank you and Good Luck!

## HERB SEED SOURCES

Express Seed Company  
300 Artino Drive  
Oberlin, OH 44074-1263  
1-800-221-3838

Mellingers, Inc.  
2310 W. South Range Rd  
North Lima, OH 44452-9731  
1-216-549-9861

Ball Seed Company  
622 Town Road  
West Chicago, IL 60185-2698  
1-708-231-3500

G.S.Grimes Seeds  
201 W. Main Street  
Smethport, PA 16749  
1-800-241-SEED

These companies also carry herb plugs. There are many other seed sources to try. You can find them by simply looking through any gardening catalog. Be sure to always ask for "BULK" prices.

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## RECOMMENDED BOOKS/MATERIALS

Rodale's Encyclopedia Of Herbs  
comprehensive for all phases of growing

The Herb Companion Magazine  
Bi-monthly..Loveland,CO

Growing Herbs: A Guide to Management  
Rosemary Titterinton  
ISBN 0-852223-555-1

The Herb Growing & Marketing Network  
3343 Nolt Rd  
Lancaster, PA. 17601 \$4.00

The Business of Herbs  
Northwind Farm Publications  
RR2 Box 246Y, Shevlin, MN 566676  
\$20/year